

# THE NATURE OF VOLUNTEERING

Edwin B. Forsythe National Wildlife Refuge Volunteer Newsletter

### **Explore the Wonders of Nature - Volunteer**

Fall 2009

### DID YOU KNOW ...



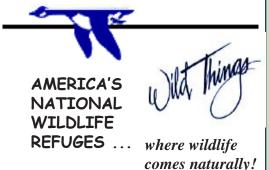
One out of every third bite of food comes to us thanks to pollinators? From beautiful butterflies to busy bees, it's clear that pollinators are essential to life on our planet.

But, declines in pollinators in North America and around the world pose what could be a significant threat to biodiversity, global food webs and human health.

Here are the top five ways you can help pollinators:

- 1. Use Native Plants
- 2. Hang Hummingbird Feeders
- 3. Build a Bee House
- 4. Plant a Butterfly Garden
- 5. Certify Your Yard with National Wildlife Federation

Get more information at http://www.nwf.org/index.cfm



# GEORGE MORGAN NAMED FORSYTHE'S VOLUNTEER OF THE YEAR



The staff of Edwin B. Forsythe NWR held their 11th annual volunteer (Friends and partners) appreciation dinner at a local restaurant on June 13th. Over 80 volunteers attended (the most ever), including graduates from our first class of Volunteer Master Naturalist/ Certified Interpretive Guides. Among those receiving hour pins included Ed Bristow (8,000 hours), Ed



Jones (7,500), and John Williamson (5,000), George Morgan, a retired high school teacher and chairperson of the refuge's Environmental Education (EE) committee was awarded Volunteer of the Year for his dedication and commitment to creating new EE programs and strengthening existing ones. George also received a Congressional Citation signed by New Jersey's congressman, Frank LoBiondo. A new award was presented this year to exemplify a volunteer who has consistently shown commitment to the Department of Interior's priority to connect children and families to the great outdoors. Ed Jones, who has been the driving force behind the refuge's successful Hooked On Fishing, Not On Drugs derby for the past seven years, received this very first Connecting People With Nature award. During this past year, Forsythe's volunteers donated 16,258 hours, valued at \$317,194.

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## CHIEF'S

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Greg Siekaniec Chief, National Wildlife Refuge System



Credit: USFWS

#### Secret No More

National wildlife refuges have long been one of America's best kept secrets. Those days may be over.

Coastal Living magazine "discovered" national wildlife refuges earlier this year when it named two — Chincoteague Refuge in Virginia and Key Deer Refuge in Florida — among its top 10 wildlife hot spots to visit. The magazine also included Aransas National Wildlife Refuge in Texas among its 10 ideal places for wildflower viewing. The Virginia Tourism Corporation, celebrating the 40th anniversary of its "Virginia is for Lovers" campaign – chose to feature three national wildlife refuges. Seven governors named national wildlife refuges as either first or second choices for the U.S. Mint to feature on coins being created under the America's Beautiful National Parks Quarter Dollar Coin Act of 2008. And just last week, the producer for Wild Horizons Productions came to the Refuge System seeking national wildlife refuges as sites for a documentary about North American wildlife, which will be aired on the Discovery Channel. Some of you may be hearing from them as producers contemplate how to portray the Refuge System and our mission. So what will it mean if more people "discover" national wildlife refuges? Could we double the number of Refuge Friends? Could we enlist more volunteers? Could we interest youngsters in wildlife conservation as their profession or their personal passion? Could we double the membership of the Congressional Wildlife Refuge Caucus? Or, will we suddenly feel our refuge purpose is being compromised and we have no place for additional visitors?

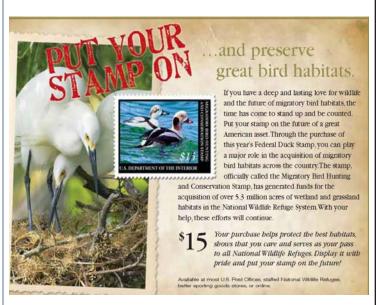
Whatever outcome we desire, we should start planning now about how we will continue to engage visitors in a way that promotes the conservation values of every refuge and wetland management district. The "secret" may well be secret no more.

## Refuge Budget Gains Appropriations Decisions Near

The FY 2010 appropriations bill for the Department of the Interior has passed both the House and the Senate. A conference committee is expected to take up the issue this month. The Senate's bill provides \$488.6 million for the Refuge System, an increase of \$5.4 million over the President's budget and \$14.7 million less than the House markup of its bill.

Except for a reduction by the Senate to climate change funding to the states, the Senate and House bills fully fund high priority Presidential and Secretarial initiatives, including a requested \$40 million increase for the Climate Impacts Initiative nationwide and \$8 million for the 21st Century Youth Conservation Corps. The Refuge System has \$2 million in the House mark-up for the youth program plus \$1 million for the volunteers program.

The federal government is operating under a FY 2010 Continuing Resolution that continues funding at FY 2009 levels through October.



Ninety-eight cents of every dollar generated by the sales of Federal Duck Stamps goes directly to purchase or lease wetlands and specifically targets vital breeding habitat within the National Wildlife Refuge System. When you buy a Duck Stamp, you are doing your part to help ensure a bright future for wildlife, waterfowl and other migratory birds. Buying Federal Duck Stamps is not only good for ducks, but for people too.

## Project: Mourning Dove National Strategic Harvest Management Plan

Background: The mourning dove banding program is the oldest banding program in the United States. It began in 1914 and, by 1998, nearly 2,000,000 birds had been banded and 4.59% of the bands had been recovered outside of the banding area. Bird banding data are useful in both research and management projects and make studies of dis-



persal, migration, behavior, life-span and survival rate, reproductive success, and population growth possible. Through the mourning dove banding program, biologists have estimated the fall population in the US to be about 350 million birds (Otis et al 2008b). Individual birds live 10 years in the wild (17 years in captivity) but the juvenile mortality rate is as high as 70% in the first year. Pairs normally produce three broods per season with two eggs in each brood. Predation is primarily by hawks, especially Cooper's hawks. Mourning doves are voracious seed eaters and, as such, are considered an economic benefit in terms of weed control. They are also the most popular game bird in the US although many states, including New Jersey, are closed to mourning dove hunting. Authority and responsibility for management of this species in the US is vested in the Secretary of the Interior and the details of the national plan are available at:

http://www.fws.gov/migratorybirds/NewReportsPublications/SpecialTopics/Mourning%20Dove%20National%20Strategic%20Harvest%20Management%20PlanSm.pdf.

We banded 30 mourning doves on the refuge this year. *How You Can Help:* Banding of mourning doves will take place next July through August. Contact refuge biologists for details.

### Project: Pre-Season Waterfowl Banding

Background: The President's National Strategy for Pandemic Influenza directs federal agencies to expand the surveillance of US domestic livestock and wildlife to ensure early warning of highly pathogenic avian influenza



in our country (USGS/USDOI Fact Sheet -2007-3004). Edwin B. Forsythe NWR field biologists began monitoring migratory ducks for HPAI H5N1 virus in 2007 and continued surveillance this year. Species captured, tested and banded included wood ducks, American black ducks, and mallards. Three of our seven banding sites around the Brigantine impoundments were

active. Due to record rainfall this summer, the refuge impoundments were above our water level target. The

ducks preferred to feed on the abundant natural foods. We had poor success getting ducks on bait. A total of 21 wood ducks, and 14 mallards were banded. In addition, we maintained one banding site at the Barnegat impoundments. We banded 21 mallards and recaptured 7 at the site. This year, puddle ducks were observed in lower numbers in comparison to previous years.

We collected a total of 13 combined oral-pharyngeal (OP) and cloacal (CL) swab samples from 12 wood ducks and 1 green-winged teal. By recommendation from the Atlantic Flyway Council, no samples were taken from mallards. Surveillance results from testing are reported online and can be viewed at:

http://wildlifedisease.nbii.gov/ai/.

Ho w You Can Help: Banding of ducks will take place next July through September. Contact refuge biologists for details.

### Project: Wild Bird Mortality Surveillance

Background: Highly Pathogenic Avian Influenza (HPAI H5N1) is a growing concern for wild bird populations in North America and the United States. In addition to testing wild birds for the virus, it is crucial to identify sick and dead wild birds that MAY be carrying the virus. Volunteers, Friends of Forsythe, and Atlantic Audubon members who conduct regular bird surveys at all refuge locations are requested to immediately notify the refuge biologists if you encounter any sick or dead birds so that specimens can be safely collected by trained staff and volunteers. DO NOT HANDLE SICK OR DEAD BIRDS.

How You Can Help: Obtain copies of the Wild Bird Mortality Surveillance Observation form from the biologists. Note any strange behaviors of birds, particularly migratory birds, during your surveys and immediately report birds that are seen as lethargic, with drooping heads, or birds that do not flush with their flocks or at your approach. Complete and turn in your forms and contact refuge biologists for details.

## Project: Diamond-backed Terrapin Nest Exclosures

Background: Edwin B. Forsythe NWR, in partnership with The Wetlands Institute and The Richard Stockton College of New Jersey, is participating in a project to protect terrapin nests from predators. Through the efforts of refuge



volunteers and interns, exclosures have been installed covering 16 terrapin nests along the Wildlife Drive. As hatchlings emerge from the nests, they will be contained within the exclosures until released.

How You Can Help: As the terrapin nests begin to hatch

continued from page 3

in late August through next Spring, nest monitors will be needed to remove exclosures. Contact refuge biologists for details. Contact refuge biologists for details.

Project: International Shorebird
Survey (ISS) and
Program for Regional and International
Shorebird Monitoring (PRISM)



Background: For many vears, John Danzen-

baker conducted weekly shorebird monitoring surveys along the Wildlife Drive and his data contributed to the hemispheric database used to aid in efforts at shorebird conservation and management. When John passed away last year, a shorebird survey team was formed. This year, surveyors are monitoring shorebird activity on the Wildlife Drive, at Little Beach and at Holgate. The Shorebird Surveys are part of a cooperative effort with Edwin B. Forsythe NWR, New Jersey Division of Fish and Wildlife, New Jersey Audubon Society and Atlantic Audubon Society. Surveys are conducted weekly during the spring migration and once every 10 days during the fall season. How You Can Help: Volunteers are welcome to join the survey team at one of the locations currently being surveyed or to begin surveys at any of the other refuge sites where shorebirds occur. Contact refuge biologists for details.



### Project: Invasive Plants Mapping and Eradication

Background: For over 10 years, refuge staff have been working to eradicate invasive phragmites. This program included treatment

of large areas of the refuge from helicopters. The aerial treatment's success makes it possible to now continue the eradication program by doing spot treatment of phragmites stands with back-pack applicators.

*How Can You Help*: Learn to map and treat invasive plant species. Contact refuge biologists for details.

Mary Harper

Thanks to Mary Harper for her contributions to this feature of our newsletter.

## Coastal Nesting Birds Intern Update (Aug. '09)

Hi everyone! Deanna and Jill here. We are coastal nesting bird interns at the Edwin B. Forsythe National Wildlife Refuge for the summer of 2009. We're going to be giving you a little run down of the things that have been going on around here. As interns we are responsible for monitoring the nest and chick activities of some of the endangered and threatened coastal nesting birds of New Jersey. The birds that are our main and current focus are monitoring piping plovers. We also monitor black skimmers and least terns.

So you may be wondering how we do our jobs? Well, it's easy; you just need a broken-in pair of shoes, some sun screen and a good pair of eyes to find plovers and their nests! Piping plovers are very nondescript and so are their nests, they do a good job of keeping them a secret from predators. Depending on the site we are on, we erect a predator exclosure to keep out the red fox and raccoon that might want to snack on this threatened species' eggs. After the exclosure is in place, we revisit this site between 2-3 times a week to record data on the nest area which includes parent plover behavior, monitoring any predators in the area and to see flooding had occurred. A clutch is usually four eggs. From the time all the eggs are laid its 27-31 days until they hatch, then another 25-28 days until the young have reached their fledge date and are ready to fly!

We have two study sites that are refuge property. The Holgate unit, which is the south tip of Long Beach Island and Little Beach. At Holgate we have seen eight nests total with two that were destroyed by tidal flooding. Five birds have made it their fledge date. We still have two active nest sites with five chicks out on Holgate; these birds are close to their fledging date so things are looking good! Now lets take a look at Little Beach, we have seen eleven total nests out there, we've had four nests destroyed at that site all but one was caused by flooding, the fourth is undetermined but we suspect it was predated upon. We've had sixteen birds make it to their fledge dates out on Little Beach, which is a great sign! We still have one active nest with one chick on Little Beach.

When it comes to terns and skimmers we haven't had much activity. On Little Beach we do have a small least tern colony at the north tip of the island. This colony includes twenty five to thirty birds. We have found only four nests but are still looking! We haven't recorded any black skimmers on Little Beach. On Holgate we have seen fifteen to twenty least terns and have found two nests. We have recorded eight black skimmers and have not found any nests.

We've got to get back to the beach, summer is almost over but our job isn't! We still have some chicks to monitor and some nests to find. But so far our season has been great! We hope that whatever it is you have been doing has been a success and hope to see you next season.

Deanna and Jill

## A WORD FROM OUR FRIENDS

The Friends of Forsythe NWR is a non-profit group established in 1998 to provide support and services to the Edwin B. Forsythe National Wildlife Refuge in Oceanville, New Jersey. Our goals are:



- Promoting a better understanding of the natural history and environment of Southern New Jersey, the Edwin B. Forsythe NWR and the National Wildlife Refuge System.
- Helping to preserve and enhance the wildlife habitat at this Refuge, and to assist the Refuge, the Refuge System and the U.S. Fish and Wildlife Service in a variety of educational and supportive efforts.

Please consider joining the Friends of Forsythe and help us accomplish these goals. Call 609-748-1535 or visit www.friendsofforsythe.org

# Friends Awarded New Jersey Division of Fish & Wildlife Conserve Wildlife Matching Grant

Grant writers extraordinaire, Bonnie and Seth Putney from our Friends Board submitted a \$3,500 grant application to landscape our new visitor contact station with native plants. This idea came about from brainstorming discussions with staff, Friends and volunteers around a desire to do something toward a native plant initiative that included pollinators.

Bonnie and Seth highlighted the State Wildlife Action Plan in the grant application which describes our head-quarters area as "a priority conservation zone." They also included information about a recent USGS bee research effort that revealed two specialized and uncommon bee species, *Ptilothrix bombiformis*, a hibiscus specialist and *Colletes mitchelli* and its nest parasite, *Epeolus lectoides*. Both of these latter species only occur in dune systems or in sandhill areas such as those found in the Carolina Sandhills National Wildlife Refuge. Thus, these species are quite uncommon and localized; providing evidence and support for open grassland landscapes that include pollinator plants."

The award letter described the process as difficult with twenty applications for a mere \$30,000. It went on to say, "Your dedication to New Jersey's wildlife is inspiring." Our Friends, volunteer garden club and staff are excited and look forward to an opportunity to place focus on imperiled landscapes, imperiled species and uncommon and unique, site specific wildlife. We will also make our new visitor contact station landscaping effort a native species demonstration area for the visiting public.

### News from





Congratulations to the winners of

Stay Focused Photo Club



Champion winner: Kathy Kelly



Challenger winner: Dani Luette

### Conservation writers wanted.

Have you written an article about Forsythe National Wildlife Refuge or the species that call it home? Are you interested in having your writing published? Many of the shore newspapers accept freelance writing submissions. These articles are often about nature or conservation-related issues. If you are interested in writing such a piece or have one on hand that you'd like to submit, talk to Colby. This could be a great way to spread the word about our refuge!

### **Gardening with Native Plants**



The key to gardening with native species of plants is patience. Germination may not be measured in days or months, but in years. Each individual decides when and where to poke its shoots up and test the environment for its own requirements to survive. Has there been enough rain? Is the soil friable enough or compact enough? Is it sunny enough or shady enough? And then, deciding to venture forth, it is faced with yet other realities ... a hungry deer or rabbit ... a bumper crop of invasive plants ... insects ... an unexpected late frost. Okay, but for the survivors, the rewards are great; spewing forth a riot of colors, four seasons of fame and glory.

In spring, the delicate white blossoms of wild strawberry and shadbush appear. The fragrant lavenders and purples of the violets and the tiny yellow marsh marigolds emerge from where they have managed to survive in vernal pools. Later, the starry orange clusters of the butterfly weed bloom just after the columbines have lost their splashes of reds and yellows. The lavender heads of wild bergamot and the bright reddish clumps of bee balm mix with lavender clusters of milkweed and the tall creamy spires of yucca. Underneath is a huge carpet of large yellow prickly pear which will later form red fruits that will keep the clumps glowing well into winter. Joining them are the coreopsis, yarrow, gaillardia and goldenrod which continue to bloom throughout the summer and into fall, punctuated by the steely blue-grey of the little bluestem and the other ornamental grasses.

For the volunteer gardeners of E.B. Forsythe NWR, this is truly a labor of love. The setbacks are many, but the end result has been well worth the effort, providing food and habitat for the residents of the refuge, and encouragement, education and beauty for the many visitors who come to admire what nature has produced with a few helping hands.

-Sue Tebbs, refuge volunteer

### Holgate Happenings

The months of June, July, and August saw extensive interaction with the public at Holgate. This included 3,416 visitor contacts at the bulkhead information table. Also, six different ranger-led interpretive walks were offered on a rotating basis on Sundays, Tuesdays and Fridays throughout the summer, drawing an average of 18 participants per walk.

Thanks to staffing provided by refuge interns, the bulkhead information table was open seven days a week during the busy period at Holgate. This effort provided a place for the public to learn about Forsythe NWR and its mission, ask questions about public use of Holgate, pick up Forsythe brochures and USFWS information, and gain help in identifying the diversity of bird life visible from the bulkhead..

Prior to the opening of the Holgate season, refuge intern Rebecca Faust and seasonal park ranger Colby Hawkinson completed four day Certified Interpretive Guide (CIG) training. CIG is a nationally-recognized certification standard for interpreters. This training helped Faust and Hawkinson provide the public with high-quality interpretive walks into the closed portion of Holgate during this busy summer period. Varied interpretive walk topics were offered in order to appeal to a wide variety of refuge visitors. A particular favorite among the public was the 'Fun in the Sun: Bird Watching at Holgate' program offered by refuge intern Rebecca Faust, an enthusiastic, life-long birder. The other topics included: 'Sea Shells by the Holgate Sea Shore," 'The History of Holgate: A Walk Through Time,' 'Marine March,' 'Barrier Island Ecology,' and 'A Journey into the Wilderness of LBI." The Holgate interpretive walks were covered in a feature article appearing in the August 28-September 3rd issue of the 'Islander' newspaper. This positive press helped the program culminate with above-average public attendance.

Chief of Visitor Services Art Webster noted that this summer's Holgate program was a big success, with higher numbers of public contacts and a wider variety of interpretive walk offerings than in years past. The Holgate interpretive program will run again next year from June through August.

Colby Hawkinson

### The Elusive Roseate Spoonbill

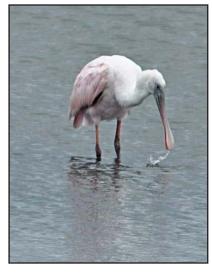


Photo courtesy of Anne Harlan

On a recent Thursday morning weekly waterbird survey, the birding team of Anne Harlan, Pete Marchetti, and John Williamson decided their main target might be the elusive roseate spoonbill that seemed to be playing hideand-seek with all comers.

They saw no sign of it until the team had worked its way nearly halfway around the dikes. A fleeting glimpse of something vaguely pink was seen by Anne among a flock of egrets on the far north side of the Danzenbaker (East) Pool. Two binoculars and one 'scope failed to spot it again. Continuing the count along the dikes took another 45 minutes to reach the north side of the dike opposite a huge flock of mostly great egrets. Pete spotted the spooney suddenly appearing among them about 75 feet away. A battery of binocs, 'scopes, and telescopic cameras suddenly trained on the apparently oblivious exotic spoonbill foraging its morning breakfast. High fives, mission accomplished.

The accompanying photo was taken by Anne who later got a nice shot of a pectoral sandpiper from along the center dike. Interested in joining a waterbird survey team some Thursday morning? Call John Williamson 609-927-4323.



## Fishing Line Recycling Partnership Begins

Anglers at Forsythe National Wildlife Refuge and other local fishing spots have great opportunities to recycle their used fishing line, thanks to a partnership formed between Friends of Forsythe, New Jersey Federation of Sportsmen (NJFS,) the New Jersey Department of Environmental Protection (NJDEP,) and the fishing line manufacturer Berkley. Discarded fishing line is not only un-



sightly but also presents a lethal hazard to many forms of fish and wildlife. Therefore, the partnership represents an important step forward in stewardship of area waterways.

Here's how the partnership works: 1) outdoor collection bins and accompanying signage are installed at fishing access points, 2) indoor collection boxes and signage are placed in fishing tackle shops, 3) as the bins and boxes fill up, volunteers retrieve line from the bins, 4) the retrieved line is sent to Berkley for recycling via prepaid UPS boxes that Berkley provides free of charge, 5) Berkley uses the recycled monofilament to produce fishing tackle boxes and fish habitat structures (called "Fish Habs") for ponds and lakes.

On Thursday, September 3rd, refuge volunteer/NJFS member Les Murray and Forsythe seasonal park ranger Colby Hawkinson installed a monofilament recycling bin at the Scotts Landing boat ramp. The Scotts Landing bin is the first of four that Murray and Hawkinson have planned for the local area. An indoor collection box is now located in the refuge headquarters building and more planned for placement in local tackle shops.

Big thanks is in order for Tali McArthur of NJDEP. Her successful grant allowed two of the outdoor bins and accompanying signage for all four outdoor bins to be provided free of charge. Thanks also to Berkley for providing indoor collection boxes and UPS return mailer boxes.

For more details on the program, contact Colby Hawkinson at 609-652-1665 ext. 11.





### Who Will Speak Out for Wildlife?

by Emilyn Sheffield

Where were you in 1967? Were your kids in college? Were you starting your career? Not yet born? What is the significance of 1967 anyway?

The U.S. population passed 200 million in 1967, up from 100 million in 1915. Projected to double again from 200 million to 400 million in a mere 76 years, these



"million person milestones" provide a human scale to think about population change and wildlife refuges. There will be 400 million people living in the United States in 2043. How many will be wildlife advocates?

Three aspects of American population change – pace, place, and face – will influence the future of wildlife and wildlife refuges. A fourth aspect – choice – will ultimately determine the future for wildlife. What choices will we make about the value of wildlife protection and wildlife refuges? How will our values inform our choices?

The pace of population change is accelerating. It took 139 years for the United States to reach the 100 million milestone, but only 39 years to go from 200 million to 300 million. The place of change is increasingly urban; 80 percent of us now live in urban or suburban areas, up from about 63 percent in the late 1960s. The place of change is also in the south and west. By 2030, the Census Bureau projects that nearly 72 million additional people will live in these two census regions. Can we choose to grow in ways that allow people and wildlife to thrive?

The face of change is varied in terms age, race, ethnicity and country of origin. At one end of the lifespan, baby boomers will more than double the percentage of the population over age 65 (about 20 percent in 2043 compared to 10 percent in 1967). At the other end of the scale, in 2005 45 percent of all school children were children of color, neatly mirroring the percentage of the U.S. population that will be persons of color in 2043.

Latinos and Asians will increase the most, approximately doubling their percentages of the population. African Americans and Native Americans will maintain or slightly increase their proportional share of the population. Like the last 100 million, many of the next 100 million people will be immigrants or their U.S. born children. Do our refuges attract visitors and advocates from all the faces of America?

Refuge professionals must integrate wildlife issues with the aspirations of older, more urban and more diverse Americans, yet also engage younger visitors. They must also share (and explain more simply) the research that guides decision-making so that a wider range of allies and advocates can understand and commit to securing a future for wildlife. Finally, refuges must share stories of successful recovery efforts to inspire people to work together to preserve wildlife, especially by working in partnership with Friends and other organizations:

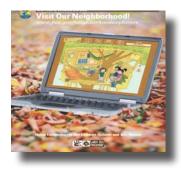
- Expand educational programming about national wildlife refuges where children and families gather – at schools and community festivals.
- Reconnect baby boomers with their natural values through volunteerism, nature study, and Friends groups. Boomers came of age during the environmental movement. They can become passionate and powerful allies as they move into their post-career years.

Use the I-Triad – invite, include, involve – for outreach, a strategy created by Deb Chavez of the Forest Service to engage Latinos: Invite (learn about Latino perceptions), Include (bring Latinos into decision-making), and Involve (add Latinos to Friends boards). Use the I-Triad to connect with any community of interest.

Emilyn Sheffield is a Professor of Recreation and Parks Management at California State University, Chico. For more than 20 years she has worked with partners to connect people to the parks and protected places that enhance our lives. Her "trends work" helps local, state, and federal agencies and conservation organizations respond more effectively to changing demographic and lifestyle trends. She frequently keynotes gatherings of natural resource agencies, conservation and stewardship organizations, and tourism associations. She is currently exploring community engagement strategies in volunteerism and conservation stewardship at the Golden Gate National Parks in San Francisco.

### Visit Our Neighborhood, Then Go Outside in Yours!

The U.S. Fish and Wildlife Service has launched the Neighborhood Explorers (NX) website! Designed in partnership with Utah State University and LetterPress Software for 8–11 year olds, their edu-



cators and caregivers, the website reaches those not currently participating in outdoor programs and activities.

Discovery is as easy as a click of the mouse. Exploring the Club-House users can seek and identify birds by silhouette, learn about endangered and invasive species, find Sam the praying

mantis, take "Lucy's NX Challenge" and more. Just moving the mouse around the Club-House will take the user to new places. Explorers create nature reports and see their state's Top Explorer. They earn badges as they complete projects, answer trivia questions and play games. Action projects include building bird houses, planting native plants, and adopting new habits, such as recycling and conserving water and electricity.

Specific website goals and outcomes are based on research about the target audience. The overall goal is to meet the audience where they are—on the computer—and offer a "safe" place to explore nature. Then, as their comfort level grows, explorers are encouraged to go outside to explore their "real" neighborhoods.

### **NX** Goals

- 1. Children will spend more time playing in nature under adult supervision.
- 2. Children will be able to recognize some elements of nature in their area. Children will demonstrate an attitude of stewardship by describing what they can do to protect their local environment.

One challenge faced by LetterPress Software was to develop a virtual Club House that could become a real clubhouse. The hope is that nature centers, youth groups, schools, national wildlife refuges and others will use the website's projects and activities to start their own real world Neighborhood Explorers Club.

Through its Neighborhood Explorers website and other activities of the Connecting People with Nature: Ensuring a Legacy of Conservation priority, the U.S. Fish and Wildlife Service creates a foundation to sup-

port Department of the Interior Secretary Salazar's "21st Century Youth Conservation Corps."

Check it out for yourself. Go to the Neighborhood Explorers website at www.fws.gov/neighborhoodexplorers.

#### Nature-Deficit Disorder

The American people, especially children, spend less time playing outdoors than any previous generation. Recent research shows that our nation's children are suffering from too much time inside. Kids today spend an average of 6.5 hours/day with television, computers and video games. In fact, a child is six times more likely to play a video game than to ride a bike. What does this mean? If children are raised with little or no connection to nature, they may miss out on the many health benefits of playing outdoors. Nature is important to children's development - intellectually, emotionally, socially, spiritually, and physically. As children's connection to and time spent in nature has declined, childhood ailments and medical problems have vastly increased:

- Childhood obesity rates for children age 6-11 have risen four-fold since 1971;
- Type 2 diabetes in children and adolescents has skyrocketed from 2 to 4% of all childhood diabetes before 1992 to 16% by 1994:
- The number of children on prescription medications to treat Attention Deficit Hyperactivity Disorder (ADHD) has increased by 100 fold in less than 50 years; and
- Prescriptions for antidepressants for children have doubled in 5 years

You probably remember how much fun it was to play outdoors as a child, but you may not have known that it was good for you! Children who play outdoors regularly enjoy better motor skills, physical fitness and general health:

- Children who interact with nature have better cognitive and creative skills than their more housebound counterparts;
- Interaction with the environment can help children deal with stress:
- Children with symptoms of ADHD may have their symptoms and need for medication alleviated through regular outdoor interactions; and
- Children who interact regularly with nature tend to show improved test scores.

If a child is to keep alive his inborn sense of wonder, he needs the companionship of at least one adult who can share it, rediscovering with him the joy, excitement and mystery of the world we live in." – Rachel Carson



## WHO'S ON STAFF?

Project Leader Steve Atzert

Deputy Project Leader Brian Braudis

Chief of Visitor Services Art Webster

> Park Ranger Colby Hawkinson

Wildife Biologists Kevin Holcomb, Vinny Turner

> Biological Technician Jeff Sloane

Refuge Law Enforcement Officer Chris Pancila

> Administrative Officer Martha Hand

> Volunteer Coordinator Sandy Perchetti

Maintenance Professionals Tom Holdsworth, Roger Dutch





Edwin B. Forsythe National Wildlife Refuge P.O. Box 72, Great Creek Road Oceanville, NJ 08231 609-652-1665 http://www.fws.gov/northeast/forsythe

## THE NATURE OF VOLUNTEERING

K K

In spite of a one-day weather postponment, 170 people took part in the Wildlife Drive cleanup.











Galloway's Clean Communities Program supplied the donuts, coffee and hot cocoa.



The refuge was selected by USA Weekend and Newman's Own Foundation to donate cereal for our Make a Difference Day volunteers!











Some wonderful music by the Greater Pinelands Dulcimer Society



Hot dogs, popcorn and cotton candy -Yummy!



The haywagon, donated by Atlantic County Utilities Authority, was a big hit!



Auntie Owl's storytelling

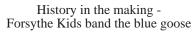


Love that face paint!













Thanks to all of you who made this event so successful!













Cutting our 70th anniversary celebration cake.





Boy Scout Troop 634 (Galloway, NJ) presented the colors for our ribbon cutting ceremony for the newly rebuilt boardwalk.



Thanks to our photographers - Dave Blood, Kevin Holcomb, Dennis Loughlin, and Ed "Mr. Wing Ding" Reed